

II. Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (cancelled)
2. (cancelled)
3. (currently amended) ~~The A system of claim 2~~ for processing signals in a well, comprising:
a packer disposed in the well;
a data source disposed in the well for acquiring data relating to fluid leakage across the
packer;
a wireless electronic transmitter disposed in the well and connected to the data source
for receiving signals from the data source and transmitting corresponding signals through the
packer; and
a receiver disposed in the well for receiving the corresponding signals from the
transmitter after transmission through the packer.
~~wherein the component is a packer and the data acquired by the data source relate to~~
~~fluid leakage across the packer.~~
4. (currently amended) The system of claim 4 3 further comprising an electrical conductor connected to the receiver for passing the corresponding signals from the receiver uphole or downhole.
5. (currently amended) The system of claim 4 3 wherein the corresponding signals are transmitted via electromagnetic waves.
6. (currently amended) The system of claim 4 3 wherein the corresponding signals are transmitted acoustically.
7. (currently amended) The system of claim 4 3 wherein the transmitter and/or receiver are mounted on, or adjacent to, the ~~component~~ packer.

8. (currently amended) The system of claim 4 3 wherein the transmitter and/or receiver are embedded in the ~~component~~ packer.

9. (cancelled)

10. (cancelled)

11. (currently amended) ~~The A method of claim 10~~ for processing signals in a well, comprising the steps of:

acquiring data in the well relating to fluid leakage across a packer in the well;
transmitting signals corresponding to the data through the packer;
receiving the corresponding signals after transmission through the packer; and
conducting the corresponding signals from the receiver. wherein the component is a
~~packer and the data acquired by the data source relate to fluid leakage across the packer.~~

12. (currently amended) The method of claim 9 11 wherein the signals corresponding to the data are transmitted via electromagnetic waves.

13. (currently amended) The method of claim 9 11 wherein the signals corresponding to the data are transmitted acoustically.

14. (cancelled)

15. (cancelled)

16. (currently amended) ~~The A system for processing signals in a well, comprising:~~
~~means disposed in the well for acquiring data;~~
~~a component disposed in the well;~~
~~transmitter means for receiving signals from the means for acquiring data and~~
~~transmitting corresponding signals through the component; and~~
~~receiver means disposed in the well for receiving the corresponding signals after~~
~~transmission through the component. of claim 15 wherein the component is a packer and the~~
~~data relate to fluid leakage across the packer.~~

17. (currently amended) The system of claim 44 16 further comprising means connected to the receiver means for passing the corresponding signals from the receiver means uphole or downhole.

18. (currently amended) The system of claim 44 16 wherein the data ~~are~~ is transmitted via electromagnetic waves.

19. (currently amended) The system of claim 44 16 wherein the data ~~are~~ is transmitted acoustically.

20. (currently amended) The system of claim 44 16 wherein the transmitter means and/or the receiver means are mounted on, or adjacent to, the ~~component~~ packer.

21. (currently amended) The system of claim 44 16 wherein the transmitter means and/or the receiver means are embedded in the ~~component~~ packer.